# 22 electronic arrays, inc.

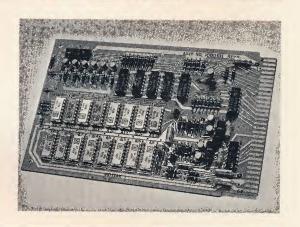
### SYSTEMS DIVISION

## **Product Summary**

MOS MEMORIES

#### MOSTAK I

MOSTAK I memory is a 512 word, 4 bit per word random access read/write memory with an 0.8 microsecond maximum read access time and a 1.0 microsecond cycle time. The MOSTAK I employs monolithic MOS random access memory devices manufactured by Electronic Arrays for the data storage and the majority of the address decoding. The board is 6-3/4" x 4-1/4". The unit offers Non-Destructive readout, expandability to 16,384 words, TTL input-output levels and all address decoding and clock drivers.

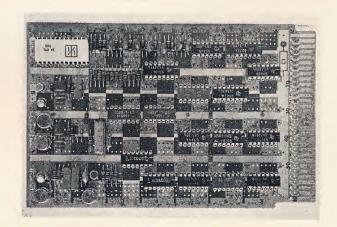


#### MOSTAK II

MOSTAK II memory is a 1024 word, 8 bit per word memory system with a full cycle time of I microsecond. Like the MOSTAK I, the MOSTAK II employs monolithic MOS random access memory devices manufactured by Electronic Arrays. The system is a two board arrangement with one board containing all the clocking and timing system while the second board contains the Memory Array. The unit can be used as a direct replacement for a core memory system of comparable size with the advantages of non-destructive readout, smaller size consideration, wider temperature range, simpler interface logic, lower power requirements, plus many other advantages.

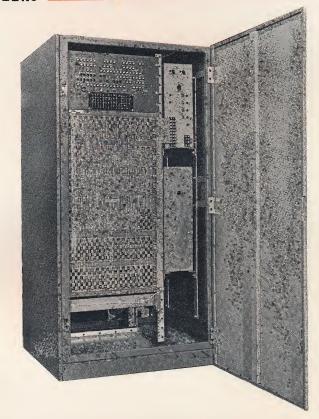
#### MODEL 8000 CHARACTER GENERATOR

The Model 8000 Character Generator card is used to convert a 64 character subset of the ASCII code to the corresponding 5 x 7 dot matrix representation for each character with each character being 5 dots wide by 7 dots high. The basic card is completely TTL compatible and contains the memory address registers, level shifters, Electronic Arrays' Read Only Memory, all clocking and timing. The unit is available for 7 line (TV) scan or 5 column scan applications. The unit is a single card 4-1/4" x 6-3/4". Power supplies and D.C. to D.C. power conversion are among several options.



#### TC 2803 and TC 2804 TAPE CONTROLLERS

The TC 2803 and TC 2804 tape controllers are completely software and hardware compatible with the IBM 360 series of computers. Each controller is capable of controlling IBM 2401 and/or 2402 models I, 2 and 3 tape drives in any combination which does not exceed eight tape drives. (IBM tape drive equivalents can be used). Data conversion, 7 track compatibility, 9 track compatibility, and 7 and 9 track compatibility are available as options. The TC 2803 can be converted to a TC 2804 and vice versa. The unit is packaged in a self-contained cabinet 30  $\times$  30  $\times$  60 (about one-half the size of the comparable IBM unit).



#### DC 311 DISK CONTROLLER

The DC 311 Disk Controller is completely software and hardware compatible with the IBM 1130 Disk Monitor System. When the controller is connected between the IBM 1130 and the IBM 2311 Disk Drive (or equivalent device), the system will appear as 5 IBM 2310 disk units with the following advantages:

- increased capacity from 5 to 50 TIMES that of 2310
- up to 10 TIMES FASTER access time allowing
  - a) improved compile time
  - b) improved assemble times
  - c) improved sort times
  - d) improved load times
- 40% lower latency time
- improved transfer rates
- performance almost equivalent to 360/30 at half the cost.

The system is a self-contained unit coordinating the design of the existing IBM installation. In some cases, the unit can be packaged within the equivalent IBM 2311 disk drive.

#### NC 100 NUMERICAL CONTROLLER

The NC 100 Numerical Controller is a system that provides simultaneous 2-axis, point-to-point positioning control of a hydraulic press, positioning the part automatically at speeds up to 500 inches per minute. The unit is capable of automatic operation (data received from a punched paper tape reader) or manual operation (from data input switches). Other versions of the controller are available and include contouring features. All controllers are supported by Manuals, Service Training Courses, Spare Parts, and Factory Backup Service.

#### PERIPHERAL EQUIPMENT

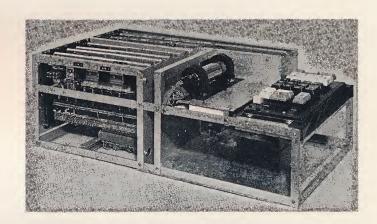


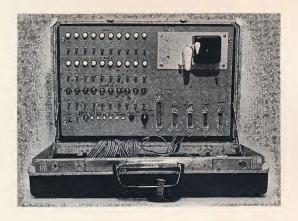
#### CT 100 COMPUTER TERMINAL

The CT 100 Computer Terminal is designed for use in digital data acquisition and management networks. The unit provides capabilities for entry and printout of fixed and variable alphanumeric data and/or query/responses with simultaneous printout of the alphanumeric data. The terminal communication with the distant computer is in ASCII code and format and is applicable to all computer systems designed to service remote teletype-writers. The unit contains a 12 pushbutton keyboard, a reader for plastic punched cards, a strip printer and an acoustic coupler. Many optional devices are available.

#### CALCULATOR DESIGNS

The Systems Division of Electronic Arrays has taken the specification requirements for a family of calculators and has designed and developed operating breadboards. The operational breadboard allows production designs to permit the optimum use of MOS technology. Electronic Arrays can supply the design effort indicating the best MOS utilization.





#### ROMSIM 100 ROM SIMULATOR

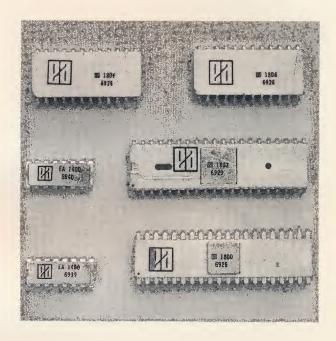
The ROMSIM 100 ROM Simulator is a device to simulate bit patterns and operation of large MOS Read-Only-Memories. The ROMSIN 100 has a maximum capacity of 512 words with 48 bits per word. The unit plugs into the sockets which would normally contain the ROM's and functions as the ROM's would function. This allows complete logic and microprogram debugging prior to finalization of the bit pattern mask. The unit can also be used as a 512 x 48 random-access Read/Write memory system.

Digital MOS circuits provide greater packaging density, reduced power requirements, and lower cost, and are opening new markets for today's equipment manufacturers.

MOS circuits in both relatively simple and highly complex arrays can be more densely packaged than other IC's by almost an order of magnitude. Though thousands of transistors can now be packed on a single silicon chip, manufacturing techniques for MOS are actually simpler. A typical circuit requires less than 40 manufacturing steps as opposed to approximately I30 steps for most bipolar integrated circuits.

This packaging density removes the cost of additional interconnection of circuit devices required by other technologies since they can be placed on the same chip.

All of these factors contribute to a heightened reliability and lower cost for MOS devices (read-only-memories, random-access memories, shift registers, functional logic blocks, etc.).



#### GENERAL CAPABILITIES

Beyond the products discussed in the brochure, EA has the facilities and capabilities to develop peripheral controllers for special requirements and memory systems to specific customer requirements. EA can also serve as a manufacturing arm with capabilities ranging from simple board production to complete systems assembly.

For additional information please contact:

